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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,478	08/28/2000	Ward M. Chewning III	99144	8425

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EXAMINER

HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 12/05/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,478

Applicant(s)

CHEWNING ET AL.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). ____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 2-10, 13-17, 19, 20, 22, 23, 27-30, 32-34 and 37-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (US Patent 6,636,505).

In regarding to claim 2, Wang teaches the step of storing a topology of an overall network including elements and links among the elements (Column 8 Line 46-49). Wang also teaches the step of receiving a service order for provision of the communications service between the unit 110 and the service provider 30 (Column 5 Line 39-42). Wang also teaches the step of using information from the service order with the topology to select particular elements from the elements of the overall network and to select particular links between the particular elements as the path for the communications service through the overall network (Figure 5).

In regarding to claim 3, Wang teaches the step of mapping the information from the service order onto the topology (Column 9 Line 65-67).

In regarding to claim 4, Wang teaches the path comprises a permanent virtual circuit (Column 10 Line 27-30).

In regarding to claim 5, Wang teaches assigning an identifier to the path (Column 8 Line 9).

In regarding to claim 6, Wang teaches a unique identifier (Column 8 Line 19-20).

In regarding to claim 7, Wang teaches creating the topology of the overall network prior to storing the topology (Column 25 Line 39-40).

In regarding to claim 8, Wang teaches the overall network comprising ADSL network (Column 6 Line 48-50).

In regarding to claim 9, Wang teaches modeling the elements and modeling the links among the elements (Column 8 Line 46-49).

In regarding to claim 10, Wang teaches topology including the locations of the elements (Column 8 Line 49).

In regarding to claim 13, Wang teaches topology including the configuration of the elements (Column 8 Line 49).

In regarding to claim 14, Wang teaches receiving a configuration of an elements from the elements (Column 6 Line 7-8) and including the received configuration of the element in the topology (Column 25 Line 40).

In regarding to claim 15, Wang teaches the topology including locations of the links (Column 8 Line 45-49).

In regarding to claim 16, Wang teaches the location of the link including an association among link, the at least two elements and each respective location of the at least two elements (Column 8 Line 5-10).

In regarding to claim 17, Wang teaches the topology including configuration of the links (Column 11 Line 3-12).

In regarding to claim 19, Wang teaches the overall network comprising ADSL network (Column 6 Line 48-50) and using the information to select a particular element 110 from the ADSL network as a part of the path for the communications service through the overall network (Column 9 Line 39-42).

In regarding to claim 20, Wang teaches the use of a DSLAM 90.

In regarding to claim 22, Wang teaches the overall network comprising ATM network 80.

In regarding to claim 23, Wang teaches the ATM network comprises an ATM switch (Column 6 Line 63).

In regarding to claim 27, Wang teaches a topology of an overall network including elements and links among the elements (Column 8 Line 46-49). Wang also teaches the information about the unit 110 and about the communication

services 30 to the unit (Column 5 Line 39-42). Wang also teaches the mapper for mapping the information onto the topology (Column 9 Line 65-67) to obtain particular elements from the elements of the overall network and to obtain particular links between the particular elements the links linking the overall network whereby the particular elements and the particular links between the particular elements constitute the path for communications services between the unit and the service provider (Figure 5) .

In regarding to claim 28, Wang teaches the path comprises a permanent virtual circuit (Column 10 Line 27-30).

In regarding to claim 29, Wang teaches assigning an identifier to the path (Column 8 Line 9).

In regarding to claim 30, Wang teaches a unique identifier (Column 8 Line 19-20).

In regarding to claim 32, Wang teaches the overall network comprising ATM network 80 and an ATM switch (Column 6 Line 63).

In regarding to claim 33, Wang teaches the overall network comprising a telecommunication network including a central office serving the unit (Figure 2).

In regarding to claim 34, Wang teaches topology including the locations of the elements (Column 8 Line 49).

In regarding to claim 37, Wang teaches topology including the configuration of the elements (Column 8 Line 49).

In regarding to claim 38, Wang teaches receiving a configuration of an elements from the elements (Column 6 Line 7-8) and including the received configuration of the element in the topology (Column 25 Line 40).

In regarding to claim 39, Wang teaches the topology including locations of the links (Column 8 Line 45-49).

In regarding to claim 40, Wang teaches the location of the link including an association among link, the at least two elements and each respective location of the at least two elements (Column 8 Line 5-10).

In regarding to claim 41, Wang teaches the topology including configuration of the links (Column 11 Line 3-12).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Waters et al. (US Patent 5,832,069).

In regarding to claim 11, Wang teaches topology including the locations of the elements (Column 8 Line 49). Wang, however, does not teach explicitly that the location of the element comprising the building location of the element. Water teaches that the location of the element comprising the building location of the element (Column 12 Line 46). It would have been obvious to one skilled in the art to modify Wang to specify the location of the element as the building location as taught by Water in order to identify the location when the element resides in a building.

In regarding to claim 12, Waters teaches CLLI, a network site and a LATA name (Column 12 Line 28-30).

In regarding to claim 18, Wang teaches the configuration of a link comprising a circuit identifier and a circuit type (Column 11 Line 3-8). Wang,

however, does not teach the configuration of a link comprising a CLLI. Waters teaches that the location of the element comprising CLLI (Column 12 Line 29). It would have been obvious to one skilled in the art to modify Wang to include CLLI as taught by Water in order to specify the location of a link. Since the location of a link is comprised of the locations two elements, the specifications of the locations of the two elements linked specify the location of the respective link.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Dziedzic (US Patent 6,166,895). Wang teaches the overall network comprising ADSL network (Column 6 Line 48-50) and also teaches the use of a DSLAM 90. Wang, however, does not teach the use of a mini-ram (MR). Dziedzic teaches the use of MR 90 in place of DSLAM. It would have been obvious to one skilled in the art to modify Wang to use MR instead of DSLAM as taught by Dziedzic in order to be more economical (Dziedzic Column 3 Line 3-5).
6. Claim 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Yokell et al. (US Patent 6,507,870).

In regarding to claim 24, Wang teaches the step of receiving a service order for provision of the communications service between the unit 110 and the service provider 30 (Column 5 Line 39-42). Wang, however, does not teach explicitly about the content of the service order. Yokell teaches a service order comprising a

telephone number (Column 23 Line 34), an identifier for the service provider (Column 23 Line 50) and a universal service order code (Column 24 Line 59). It would have been obvious to one skilled in the art to modify Wang to have such detailed service order as taught by Yokell in order to identify both the requester and the requested service.

In regarding to claim 25, Wang teaches the use of both a circuit identifier and a virtual path identifier to identify the service provider (Column 8 Line 9-10).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al., Water et al., Dziedzic and Yokell et al. as applied to claim 2-24 above. All the limitations claimed herein are already discussed in the rejection of claims 2-24.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Lemieux (US Patent 6,452,942) and further in view of Dziedzic. Wang teaches the overall network comprising ADSL network (Column 6 Line 48-50) including a DSLAM 90. Wang, however, does not teach the use of multiple DSLAM. Lemieux teaches the use of multiple DSLAM 218. It would have been obvious to one skilled in the art to modify Wang to use multiple DSLAM as taught by Lemieux in order to provide services to more users. Wang in view of Lemieux teaches ADSL network including multiple DSLAM. Wang in

view of Lemieux, however, does not teach the use of a mini-ram (MR). Dziedzic teaches the use of MR 90 in place of DSLAM. It would have been obvious to one skilled in the art to modify Wang in view of Lemieux to use MR instead of DSLAM as taught by Dziedzic in order to be more economical (Dziedzic Column 3 Line 3-5).

9. Claim 35-36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Waters et al..

In regarding to claim 35, Wang teaches topology including the locations of the elements (Column 8 Line 49). Wang, however, does not teach explicitly that the location of the element comprising the building location of the element. Water teaches that the location of the element comprising the building location of the element (Column 12 Line 46). It would have been obvious to one skilled in the art to modify Wang to specify the location of the element as the building location as taught by Water in order to identify the location when the element resides in a building.

In regarding to claim 36, Waters teaches CLLI, a network site and a LATA name (Column 12 Line 28-30).

In regarding to claim 42, Wang teaches the configuration of a link comprising a circuit identifier and a circuit type (Column 11 Line 3-8). Wang,

however, does not teach the configuration of a link comprising a CLLI. Waters teaches that the location of the element comprising CLLI (Column 12 Line 29). It would have been obvious to one skilled in the art to modify Wang to include CLLI as taught by Water in order to specify the location of a link. Since the location of a link is comprised of the locations two elements, the specifications of the locations of the two elements linked specify the location of the respective link.

10. Claim 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Yokell et al..

In regarding to claim 43, Wang teaches the step of receiving a service order for provision of the communications service between the unit 110 and the service provider 30 (Column 5 Line 39-42). Wang, however, does not teach explicitly about the content of the service order. Yokell teaches a service order comprising a telephone number (Column 23 Line 34), an identifier for the service provider (Column 23 Line 50) and a universal service order code (Column 24 Line 59). It would have been obvious to one skilled in the art to modify Wang to have such detailed service order as taught by Yokell in order to identify both the requester and the requested service.

In regarding to claim 44, Wang teaches the use of both a circuit identifier and a virtual path identifier to identify the service provider (Column 8 Line 9-10).

11. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al., Water et al., Lemieux, Dziedzic and Yokell et al. as applied to claim 27-44 above. All the limitations claimed herein are already discussed in the rejection of claims 27-44.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the network management.

U.S. Patent 5,684,967 to McKenna et al.

U.S. Patent 6,226,263 to Iwase et al.

U.S. Patent 6,480,487 to Wegleitner et al.

U.S. Patent 6,563,835 to Chen

U.S. Patent 6,570,974 to Gerszberg et al.

U.S. Patent 6,597,689 to Chiu et al.


U.S. Patent 6,600,724 to Cheng

U.S. Pub. 2002/0055988 to Crooks

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


Clemence Han
Examiner
Art Unit 2665


HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600